



走刀式CNC自動車床

雙主軸，雙Y軸搭配360°旋轉之B軸

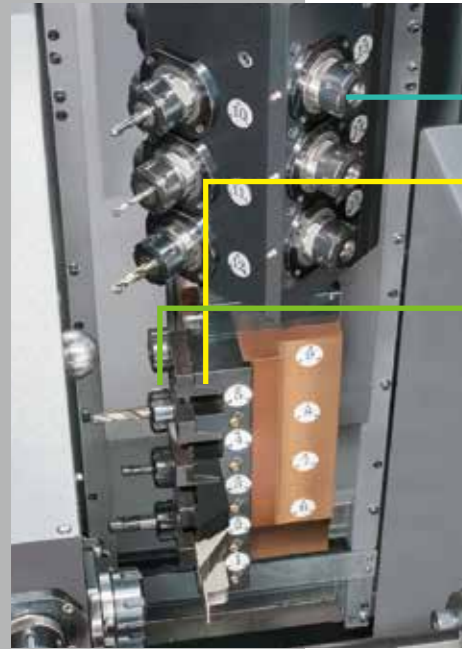
CNC AUTO LATHE WITH FIXING HEAD

Twin Spindle, Twin Y-axes and 360° Rotating B-axis

富格蘭SUPER CSL是一部多功能之車銑複合車削中心機
除了配合各種刀座，以滿足全方位的加工需求
更具有正、背主軸設計，讓任何複雜的工件都可以一次加工完成

The SUPER CSL from Poly Gim is a multitasking turning center designed for Turning/milling operations. In addition to equip with various tool holders to meet versatile machining requirements, this machine is also designed with main and sub-spindle that allow any complicated part to be accomplished with only one setup.

主軸刀具系統
Tooling System for Main Spindle



- ▶ B軸(360°旋轉) 動力刀具:12支
B-axis (360° rotation) Driven tools :12 pcs.
- ▶ 6支外徑刀具刀座(52/60型5支)
6 pcs O.D turning tool holder
(type 52 / 60 5pcs)
- ▶ 內徑刀: 4支 I.D. tools: 4 pcs.

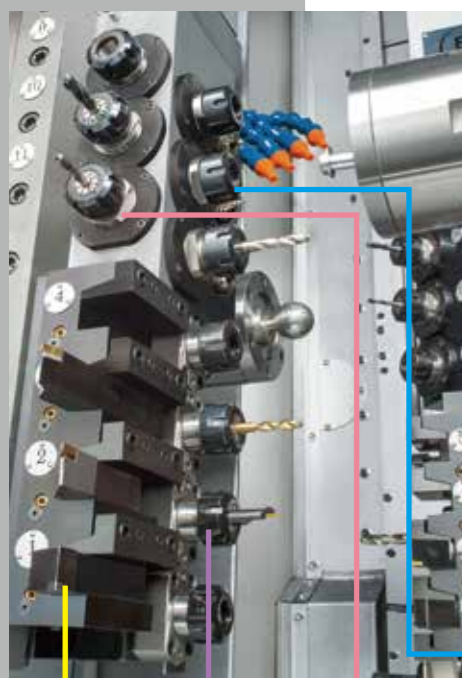
機器特性

- 雙Y軸設計。
- B軸可作360旋轉，適合任何角度之鑽孔、攻牙、銑削。
- B軸旋轉採用伺服馬達驅動，定位精度可達0.001°。
- 主軸及背主軸轉速3,000rpm。
- 主軸及背主軸通孔徑65 mm。
- 主軸及背主軸都具有Cs功能，以執行輪廓加工。
- 所有移動軸皆採用耐重負荷滾柱型線性滑軌。
- 主軸頭為固定結構。
- 機器底座採用高級鑄鐵製成，經回火及應力消除處理，保證結構長期不變形。

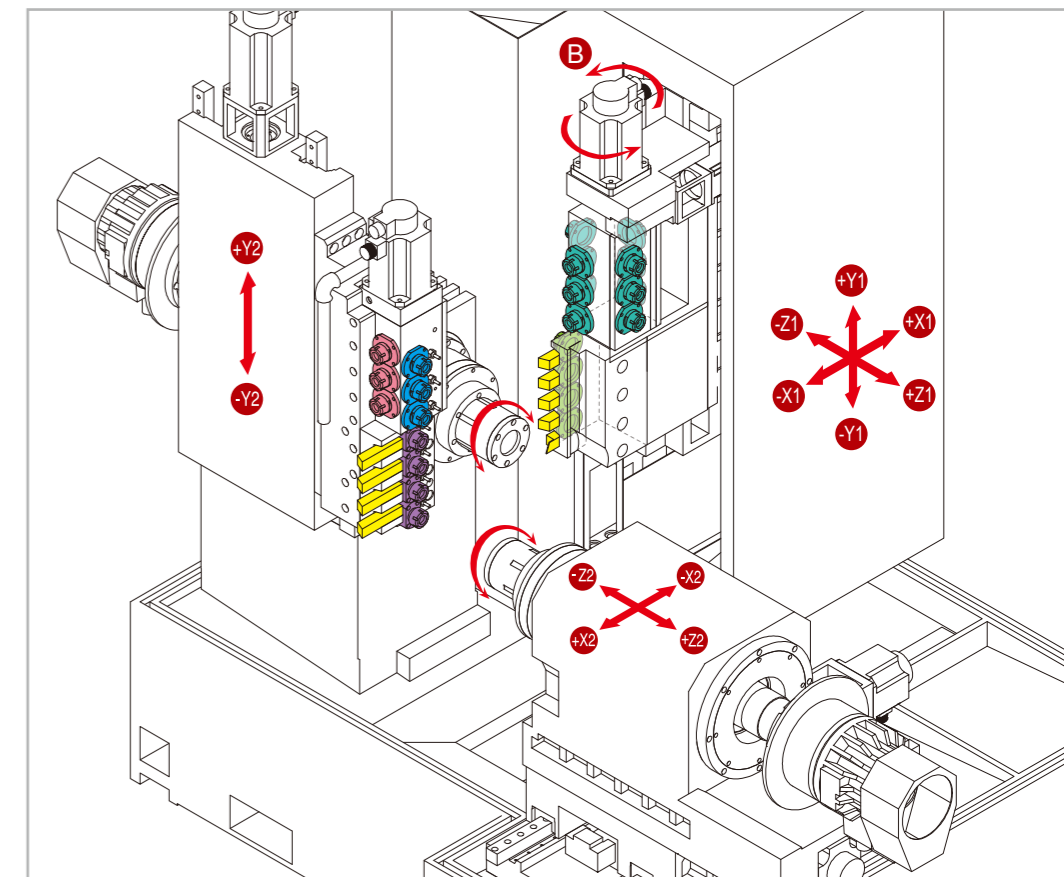
Machine Features

- Twin Y-axes design.
- B-axis can be rotated 360° to perform any degree of drilling, tapping and milling operations.
- B-axis rotation is driven by a servo motor, providing high indexing accuracy of 0.001°.
- Main and sub-spindle speed : 3,000 rpm.
- Through hole diameter of main and sub-spindle:Ø65 mm.
- Both main and sub-spindle have Cs function for performing contour machining.
- All moving axes are mounted with heavy duty, roller type linear motion guides.
- Fixed type spindle structure .
- The machine base is manufactured from high quality cast iron, tempered and stress relieved to eliminate structural deformation problems.

背主軸刀具系統
Tooling System for Sub-spindle



- ▶ 端面動力刀具: 3支 Off-center driven tools: 3 pcs.
- ▶ 側銑刀: 3支 Cross milling tools: 3 pcs.
- ▶ 外徑刀: 4支 O.D turning tools: 4 pcs.
- ▶ 內徑刀: 4支 I.D. tools: 4 pcs.



第一系統 SYSTEM 1

- ▶ 6支外徑刀具刀座(52/60型5支) 6 pcs O.D turning tool holder (type 52 / 60 5pcs)
- ▶ 4支正面內徑刀具刀座 4 pcs I.D stationary tool hold
- ▶ 12支斜角度鑽銑刀具刀座 12 pcs 360° B axis driven tool holder

第二系統 SYSTEM 2

- ▶ 4支外徑刀具刀座 4 pcs O.D turning tool holder
- ▶ 4支正面內徑刀具刀座 4 pcs I.D stationary tool hold
- ▶ 3支側面鑽銑刀具刀座 3 pcs cross working driven tool holder
- ▶ 3支背面偏心鑽銑刀具刀座 3 pcs back off-center driven tool holder